Quality Control

Work Order ID 120340 Wednesday, June 04, 2014 3:02:27 PM			*120340*							Page 1
Item ID: D3396 Revision ID: Item Name: Bushir			Accept	*N900	040	100)*	Setup Sta	. 171	S1* S2*
Start Date: 6/04/1 Required Date: 6/04/1 Reference:	_ •			Cust Item 1 Customer:				Run Sta	.	
Approvals: Proc	ess Plan: _MLJ	Date: 14-06-0	∑ Tooling:	D	ate:				~1 <i>\</i> 1	R1*
	-	Date:	SPC (Y/N):	D	ate:			Sto	, *V	R2*
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr									
D3396	Rev B									
100 Hardinge Hardinge CNC Lathe Small	Hardinge CNC LATH Memo Turn as p	IE SMALL per Folio FA514 and Dwg l	0.00 0.00 D3396Deburr				30			DAS 25 /4/6-/3 9-89
*110 *11 0 *	QC2- Inspect parts of	ff machine FAI/FAIB	0.00				30			DAS 25 /4-/-/
QC Quality Control	Memo		0.00			2				9-89
¹²⁰ *120 *	QC8- Inspect parts -	second check	0.00				<u> 3</u> 0	Ø		DAS 44 9-89
QC	Memo		0.00							

DQA:		Date:										TART
					WORK ORDER NON	-CC	ONFO	RMANCE / UF			_	AEROSPACE
QA Closed:		Date:						*	W	ork Order up	date only	
Work Order:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Work Order.		·····			Rework	1		Skid-tube	Crosstube	1	Water Jet	Engineering
Part No.					Scrap	1 1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
		•			Use-as-is			noforming	Finishing	-	re/Packaging	Other
NCR No.					Suspected Unapproved			Large Fab	Composite		Supplier	
Root				Desc	ription of work order update	1	nitial	Acti		Sign &	_	
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	iption	Date	Verification	QC Inspector
Design												
Doc/Data	1											
Equip/Tooling												
Handling/Pre	1	1										
Material	-							1				
Operator	-											
Offset/Setupg Process	-											
Supplier	1											
Training	1 .					1						
Transport	1											
Unapproved	-					ļ						
SVC				· · · · · · · · · · · · · · · · · · ·		FA	ULT CA	TEGORY				
Landing (Gear				General		_		-	_	- -	_
	Bending			L	Bend		Folio/F	Program		Outside Dim	<u> </u>	Pressure/Forced
	Centre N	ot Concer	ntric	_	BOM/Route		Grain		_	Over/Under	<u> </u>	Set-up
	Cracks			L	Broken/Damage/Defect	<u>_</u>	Hardwa		L	Part Incorre	 	Temperature/Cure
ئ ا	Crimp/Kii	nk/Ripple	/Wave		Burrs		1	ion Incomplete/Un	· -	Part Lost/M	issing	Weld
***	Cuffs			_	Contamination		4	tions Incomplete/U	Inclear	Part Moved	L	Wrong Stock Pulled
· · ·	Crushing				Countersink	<u></u>	4	gned/off center	<u> </u>	Positioned V		Tout.
	Heat Trea				Cut Too Short		Mislab			Power Loss/	Surge _	Other
	Inspectio	•	Tube		Drawing	\vdash	Misrea			-		
	Marks/Ch			-	Drill Holes	\vdash	Off-set					
-	Turning S			<u> </u>	Finish	\vdash	-	Calibration		-		
	Wave/Tw	vist in Tub	oe		Fit/Function		Jout of	Sequence				

120340

Page 2

Wednesday, Jun	ne 04, 2014 3	3:02:27 PM		1/(J. 74()		<u>.</u>						
Item ID: Revision ID:	D3396-3		A	Accept	*N900	040	100)*	Setup	Start	*N	S1*	
Item Name:	Bushings									Stop	*N	S2*	
Start Date:	6/04/14	Start Qty: 30.00	*30*		Cust Item 1	D:							
Required Date	: 6/04/14	Req'd Qty: 30.00	*30*		Customer:								
Reference:							_		Run	Start			
Approvals:	Process Pl	an:	Date:	Tooling:	D:	ate:			Kuli		*N	R1*	
.	QC:		Date:	SPC (Y/N):	D	ate:				Stop	*N	R2*	
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept	t Rej Qty		Reject Number	Insp. Stamp	_
130		Identify as per dwg & Sto	ck Location: <u>570</u> 37	0.00									
120 Packaging Packaging		Мето		0.00				_3)X_	28 9-89		JUN 1 2 20	1
, doughB													
140		QC21- Final Inspection -	Work Order Release	0.00									
140		Memo		0.00									
Quality Control		Weito									141	06-12	
									N	ルン	17		

DQA:			Date:						•					TAACT
						WORK ORDER NON	-CC	ONFO	RMANCE / UPDATE				_	AEROSPACE
QA Closed:			Date:							W	ork Order up	date only		
Work Orde	or.					DISPOSITION			AGA	AINST DE	PARTMENT	/PROCESS		
Work Ora	-1.					Rework	1		Skid-tube Cross	stube		Water Jet		Engineering
Part N	lo.					Scrap			⊢	ll Fab	Pro	d. Eng. Coor.		Quality
	•					Use-as-is			· —	shing		re/Packaging		Other
NCR I	۱o.					Suspected Unapproved			Large Fab Comp	osite		Supplier		
Root	1				Desc	ription of work order update	i i	nitial	Action		Sign &			
Cause	\square	Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	1	QC Inspector
Design		i										E		
Doc/Data														
Equip/Tooling					•				†					
Handling/Pre														
Material	*,1						1							
Operator												,		
Offset/Setup	\Box													
Process	Н						ļ							
Supplier	\vdash			ŀ	1									
Training						•								
Transport	Н						1							
Unapproved	ш		L	<u>t</u>			FΔI	III T CA	TEGORY		<u> </u>	L		•
Landi	na G		 -		_	General		OLI OA						· · · · · · · · · · · · · · · · · · ·
Landi		Bending				Bend] Folio/f	Program		Outside Dim	ensions	P	ressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	ł ·	_	et-up
		Cracks				Broken/Damage/Defect	\vdash	Hardwa	are		Part Incorre	cí		emperature/Cure
	\vdash	Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Unqualified	d $igwidth$	Part Lost/Mi	issing	\neg _v	Veld
	-	Cuffs		•		Contamination		Instruc	tions Incomplete/Unclear		Part Moved		٧	Vrong Stock Pulled
		Crushing		٠		Countersink		Misali	gned/off center		Positioned V	Vrong		
		Heat Trea				Cut Too Short		Mislab	eled		Power Loss/	Surge	C	ther
		Inspection	n Strip in	Tube		Drawing		Misrea	d					
		Marks/Ch	natter			Drill Holes		Off-set				<u> </u>		
1		Turning S	equence			Finish		Out of	Calibration					
		Wave/Tw	ist in Tub	e		Fit/Function		Out of	Sequence					

Page 1

Wednesday, June 04, 2014 3:02:27 PM

Work Order ID: 120340

120340

Parent Item:

D3396-3

D3396-3

Parent Item Name: Bushings

Start Date: 6/04/14

Required Date: 6/04/14

Start Qty: 30.00

Required Qty: 30.00

Comments:

IPP A05.10.03New issueKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MDELRINR0.750		Purchased	No			110	f	71.3977	0.0625	2	, , ,		
MDELBI	VIRO 750)							**		V 12	1-6-12	

Delrin Round Bar 0.75" color: black

Location	Loc Oty	Loc Code	
MAT039	71.3977		
m127442	24.3977		
m129148	47		¢ 1.0

DQA:			Date:			WORK ORDER NON	-00	NEO	DNAANCE / HE	DATE				DART
QA Closed:			Date:			WORK ORDER NON			MIVIAIVEL / OF		ork Order up	odate only		AEROSPACE
Work Orde	ar.					DISPOSITION				AGAINST DI	EPARTMENT,	/PROCESS		
WOIK OIGE	-	.,,,				Rework	1		Skid-tube	Crosstube	7	Water Jet		Engineering
Part N	lo.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	┪	Quality
, until	-					Use-as-is	1		noforming	Finishing		re/Packaging		Other
NCR N	10					Suspected Unapproved			Large Fab	Composite		Supplier		
Root					Desc	ription of work order update	Π	nitial	Acti	on	Sign &	<u> </u>		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	ption	Date	Verification		QC Inspector
Design														
Doc/Data							1							
Equip/Tooling							İ							
Handling/Pre														
Material														
Operator	Щ				·									
Offset/Setup		•												
Process	Щ								· ·					
Supplier		•	:					٠						
Training					İ									
Transport	\dashv											1	-	
Unapproved				<u> </u>			FAI	III T CA	TEGORY					
1		·				General	rA.	OLI CA	TEGORT					
Landii		ear Bending				Bend		leolio/s	Program	Г	Outside Dim	ensions [\neg_{p}	ressure/Forced
		Centre No	nt Concer	ntric	-	BOM/Route	\vdash	Grain	rogram		Over/Under	- F		et-up
l .	\boldsymbol{H}	Cracks	of Concer	iti ic	┢	Broken/Damage/Defect	\vdash	Hardwa	are		Part Incorre	F	_	emperature/Cure
	-	Crimp/Kir	nk/Rinnle	/Wave		Burrs	-	1	ion Incomplete/Un	gualified	Part Lost/M	ŀ	_	Veld
	H	Cuffs	путпрыс	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Contamination	\vdash	4 '	tions Incomplete/U	· -	Part Moved	· •	\dashv_{v}	Vrong Stock Pulled
	-	Crushing				Countersink		4	gned/off center		Positioned V	-		
	-	Heat Trea				Cut Too Short		Mislab	-		Power Loss/		\neg	Other
	Н	Inspection		Tube		Drawing		Misrea		_		•		
	-	Marks/Ch	•			Drill Holes		Off-set						
	$ldsymbol{}$	Turning S				Finish		Out of	Calibration					
1	-	Wave/Tw				Fit/Function		Out of	Sequence					

DART AEROSPACE LTD	Work Order: 120340	
Description: Spacer	Part Number: D3396-3	
Inspection Dwg: D3396 Rev: B	Page 1 of	1

Inspection Dwg:	: D3396 Rev	/: B				Pa	ge 1 of 1
	FIRS	T ARTICLE II	NSPECTI	ON CHE	ECKLIST		
	_	First Arti	_		otype		
Drawing	Tolerance	Actual	Accept	Reject	Method o	of Con	nments
Dimension	Tolerance	Dimension	Accept	neject	Inspectio	n Coll	illiellis
0.226	+/-0.010	-232			vecn	22-10	
Ø0.313 3/6	+0.005/-0.000	-319					
Ø0.740	+/-0.010	-741					
0.032 x 45°	+/-0.010	.028X45°					
:							
	,,,						
	,						
			DAS				
Measured by:	111	Audited by:	44 9-89		Prototyp	e Approval:	N/A
Date:	14-6-12	Date:	14/06	112		Date:	N/A
Rev Date	Change					Revised by	Approved

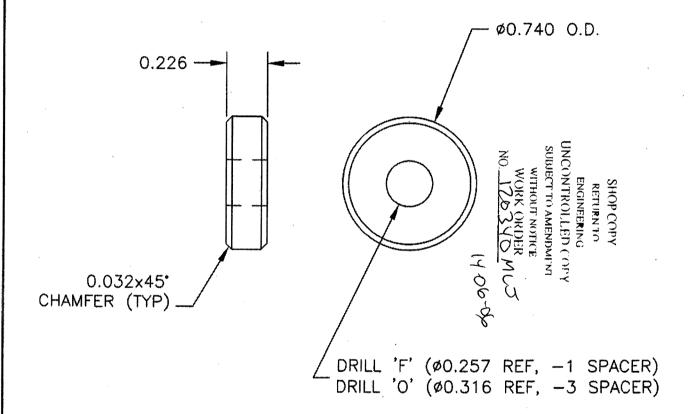
		DAS		
Measured by:	Audited by:	44	Prototype Approval:	N/A
Date: 14-6-12	Date:	14/06/12	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	06.03.09	New Issue	KJ/JLM ox	
				7,0,7



DESIGN	CP	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECK	#	APPROVED #	DRAWING NO. D3396 SHEET	REV. B
DATE	······································		TITLE .	SCALE
 05.0	4.27		SPACER	2:1
Α		05.03.10	NEW ISSUE	
В		05.04.27	ADD -3	





D3396-1/-3 SPACER

- 1) MATERIAL: DELRIN (DART SPEC. M-DELRIN-R)
- 2) FINISH: NONE
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

Copyright © 2005 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.